FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office

Attorney Docket Number RA9-99-0110/4269-83

Applicant: Hwang, et al.

Serial No. 09/430,501

LIST OF DOCUMENTS CITED BY APPLICAN

(Use several sheets if necessary)

Filing Date: October 29, 1999

Group 2731

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			U.S	PATENT DOCUMENTS	Techno	ology Center	2600
Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	1	-5,835,538	11/10/98	Townshend —	375	295	
	2	5,831,561	11/3/98	Cai et al.	341	106	
	3	5,809,075	9/15/98	Townshend	375	254	
100	4	5,801,695	9/1/98	Townshend	375	340	
	5	5,793,809	8/11/98	Holmquist	375	242	
	6	5,784,405	7/21/98	Betts et al.	375	222	
	7	5,778,024	7/7/98	McDonough	375	216	
	8	5,768,311	6/16/98	Betts et al.	375	222	
	9	5,761,247	6/2/98	Betts et al.	375	316	
	10	5,757,849	5/26/98	Gelblum et al.	375	222	
	11	5,754,594	5/19/98	Betts et al.	375	285	
- 11	12	5,729,226	3/17/98	Betts et al.	341	94	
	13	5,598,401	1/28/97	Blackwell et al.	379	94	
V. (1	14	5,546,395	8/13/96	Sharma et al.	370	84	
	15	5,534,913	7/9/96	Majeti et al.	348	7	J: 0
	16	5,528,679	6/18/96	Taarud	379	34	
	17	5,528,625	6/18/96	Ayanoglu et al.	375	222	
	18	5,406,583	4/11/95	Dagdeviren	375	5	
	19	5,394,437	2/28/95	Ayanoglu et al.	375	222	
	20	5,394,110	2/28/95	Mizoguchi	329	304	
	21	5,291,479	3/1/94	Vaziri et al.	370	58.2	
. :	22	5,253,291	10/12/93	Naseer et al.	379	406	
	23	5,210,755	5/11/93	Nagler et al.	370	108	
	24	5,157,690	10/20/92	Buttle	375	14	
* 1	25	5,134,611	7/28/92	Steinka et al.	370	79	
	26	5,119,403	6/2/92	Krishnan	375	39	
	27	5,119,401	6/2/92	Tsujimoto	375	14	
2.	28	5,067,125	11/19/91	Tsuchida	370	79	
	29	5,052,000	9/24/91	Wang et al.	371	43	Ì
- 4	30	5,040,190	8/13/91	Smith et al.	375	4	·
-	31	5,033,062	7/16/91	Morrow et al.	375	7	
-	32	5,014,299	5/7/91	Klupt et al.	379	98	
· · · · · · · · · · · · · · · · · · ·	33	4,995,030	2/19/91	Helf	370	32.1	
	34	4,985,902	1/15/91	Gurcan	375	14	
	35	4,972,360	11/20/90		364	724.04	
	36	4,901,333	2/13/90	Hodgkiss	375	98	
• •	37	4,890,303	12/26/89	_	375	107	
	38	4,884,285	11/28/89		375	25	
•	39	4,868,863	9/19/89	Hartley et al.	379	98	
	40	4,797,898	1/10/89	Martinez	375	7	1

EXAMINER

DATE CONSIDERED

Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if *EXAMINER not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office LIST OF DOCUMENTS CITED BY APPLICANT OIPE				Attorney Doo RA9-99-01			Serial No. 09/430,501	
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	41	4,760,598	7/26/884DE	Refréil	<u> </u>	38000	hnology Cent	er 2600
	42	4,720,861	1/19/88	Bertrand		381	36	
	43	4,578,796	3/25/86	Charalambou	ıs et al.	375		
-	44	4,577,310	3/18/86	Korsky et al.		370	58	
	45	4,450,556	5/22/84	Boleda et al.		370	- 58	ļ
·	46	4,434,322	2/28/84	Ferrell	•	178	22.13	
	47	4,270,027	5/26/81	Agrawal et a	1.	179	81R	
	48	4,237,552	12/2/80	Aikoh et al.	•	370	83	
	49	4,132,242	1/2/79	Carroll, Jr.		137	263	
	50	4,112,427	9/5/78	Hofer et al.		340	347	- 20
	51	3,729,717	4/24/73	de Koe et al.		340	172.5	<u> </u>
	52	3,683,120	8/8/72	Schenkel	*	179	15A	
	53	3,557,308	1/19/71	Alexander e	al.	178	69.5	·
	54	5,918,204	6/29/99	Tsurumaru		704	214	
. • .	55	5,914,982	6/22/99	Bjarnason et	al.	375	222	
	56	5,911,115	6/8/99	Nair et al.		455	63	1
	57	5,887,027	3/23/99	Cohen et al.		375	222	
	58	5,881,102	3/9/99	Samson	*	375	222	
	59	5,881,066	3/9/99	Lepitre		371	20.5	
	. 60	5,872,817	2/16/99	Wei	• •	375	341	
	61		2/9/9	Moran, III e	t ol	375	222	
	62	5,870,429	1/19/99	Goldstein et		375	295	7
		5,862,184		Goldstein et		375	242	ļ
	63	5,862,179	1/19/99	Trotter	. aı.	370	468	
	64	5,862,141	1/19/99	h		375	354	
	65	5,850,421	12/15/98	Misra et al. Anderson et		370	252	
	66	5,850,388	12/15/98			375	222	
	67	5,844,940	12/1/98	Goodson et	aı.	1	222	
	68	5,838,724	11/17/98	Cole et al.	•	375	233	
	69	5,835,532	11/10/98	Strolle et al		375	286	
•	70	5,825,823	10/20/98	Goldstein et	tal.	375		
	71	5,825,816	10/20/98	Cole et al.	•	375	222	
	72	5,822,371	10/13/98	Goldstein e	cal.	375	242	- Xi.
	73	5,815,534	9/29/98	Glass		375	326	"A
	74	5,812,537	9/22/98	Betts et al.	•	370	286	
I M.	75	5,805,669	9/8/98	Bingel et al		379	28	
	76	5,784,415	7/21/98	Chevillat et	al.	375	341	
	77	5,757,865	5/26/98	Kaku et al.	*	375	344	:
	78	5,734,663	3/31/98	Eggenberge		371	39.1	
	79	5,726,765	3/10/98	Yoshida et		358	412	
	80	5,724,393	3/3/98	Dagdevirer		375	296	
	. 81	5,710,792	1/20/98	Fukawa et	al.	375	229	•
	82	5,694,420	12/2/97	Ohki et al.		375	222	
	83	5,671,250	9/23/97	Bremer et a	d	375	222	
	84	5,646,958	7/8/97	Tsujimoto		375	233	
	85	5,634,022	5/27/97	Crouse et a	1	395	704	
il	86	5,625,643	4/29/97	Kaku et al.		375	222	

FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office RA9-99-0110/4269-83						Serial No. 09/430,501		
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	87	5,566,211	10/15/984	EGABL		375	332	
•	88	5,563,908	10/8/96	Kaku et al.		375	222	i ·
· —	89	5,533,048	-7 <i>1</i> 2/96 -	Dolan · · ·		375	222	
	90	5,519,703	5/21/96	Chauffour et	al.	370	84	
	91	5,513,216	4/30/96	Gadot et al.		375	233	
	92	5,475,711	12/12/95	Betts et al.		375	240	
•	93	5,434,884	7/18/95	Rushing et al		375	235	
	94	5,432,794	7/11/95	Yaguchi		371	5.5	
	95	5,418,842	5/23/95	Cooper	:	379	98	
	96	5,402,445	3/28/95	Matsuura	• • •	375	229	
	97	5,398,303	3/14/95	Tanaka		395	51	
	98	5,386,438	1/31/95	England		375	121	· · ·
	99	5,351,134	9/27/94	Yaguchi et a	, .	358	435	,
n .	100	5,285,474	2/8/94	Chow et al.		375	13	
	101		11/23/93	Goldstein		379	97	
	101	5,265,151	10/12/93	Jaeger et al.		375	60	l'
	102	5,253,272	7/6/93	Lederer et al		364	550	1
	1	5,225,997	.		•	375	14	J.
•	104	5,142,552	8/25/92	Tzeng et al. Chen et al.		375	14	
	105	5,111,481	5/5/92			375	60	
. "	106	5,107,520	4/21/92	Karam et al.		375	98	
	107	5,065,410	11/21/91	Yoshida et a			32.1	
	108	5,007,047	4/9/91	Sridhar et al		370		
	109	5,005,144	4/2/91	Nakajima et	al.	364	565	0
	110	4,991,169	2/5/91	Davis et al.		370	77	1
٠.	111	4,953,210	8/28/90	McGlynn et	•	380	48	1
	112	4,943,980	7/24/90	Dobson et a	,	375	42	.]
,	113	4,894,847	1/16/90	Tjahjadi et a		375	121	i
	114	4,890,316	12/26/89	Walsh et al.		379	98	
	115	4,833,706	5/23/89	Hughes-Har	_	379	98	1
	116	4,756,007	7/5/88:	Qureshi et a		375	37	
	117	4,731,816	3/15/88	Hughes-Har	togs	379	98	
	118	4,208,630	6/17/80	Martinez		375	7	
	119	3,622,877	11/23/71	MacDavid e		324	73 R	
	120	5,839,053	11/17/98	Bosch et al.		455	13.1	
÷.	121	5,068,875	11/26/91	Quintin		375	78	
	122	5,058,134	10/15/91	Chevillat et	al.	375	39	
	123	5,038,365	8/6/91	Belloc et al.		375	8	[•] -{
	124	4,967,413	10/30/90	Otani		371	37.4	
	125	5,311,578	5/10/94	Bremer et a	l.	379	97	
	126	5,317,594	5/31/94	Goldstein	•	375	8	
	127	5,926,506	7/20/99	Berthold et	al.	375	222	
1	128	5,491,720	2/13/96	Davis et al.		375	222	- 8
1	129	5,353,280	10/4/94	Ungerböck		370	32.1	
	130	5,852,631	12/22/98	_		375	222	
1	131	5,732,104	3/24/98	Brown et al		375	222	r.
	132	5,796,808	8/18/98	Scott et al.	•	379	93.31	

DATE CONSIDERED

^{*}EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office					Attorney Doc RA9-99-01			Serial No 09/430,56	
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	122		5/12/08MAP	Skett et al		379	93.31		
	133	5,751,796			- 3	379	5		
ļ	134	5,187,732	2/16/93	Suzuki		379	359		
İ	135	5,640,387	6/17/97	Takahashi et al.			466		
	136	5,751,717	5/12/98	Babu et al.		370	463		
	137	5,784,377	7/21/98	Baydar et al.		370			
	138	5,887,027	3/23/99	Cohen et al.		375	222		
ē	139	5,850,388	12/15/98	Anderson et al.	114	370	252		
	140	5,914,982	6/22/99	Bjarnason et al.		375	222		
· .	141	5,726,765	3/10/98	Yoshida et al.		358	412	-	
ļ	142	5,850,421	12/15/98	Misra et al.	,	375	354	[
	143	5,729,226	3/17/98	Betts et al.		341	94]	
•	144	5,862,184	1/19/99	Goldstein et al.		375	295	•	
	145	5,911,115	6/8/99	Nair et al.		455	63	·	
	146	5,838,724	11/17/98	Cole et al.		375	222		
	147	5,784,415	7/21/98	Chevillat et al.		375	341		
	148	5,844,940	12/1/98	Goodson et al.		375	222	ł	
•	149	5,386,438	1/31/95	England		375	121	1 '	
	150	5,881,102	3/9/99	Samson	٠,	375	222	1 .	
	151	5,285,474	2/8/94	Chow et al.		375	13	Ì	
	152	5,513,216	4/30/96	Gadot et al.		375	233		
	153	5,835,532	11/10/98	Strolle et al.		375	233		
-	154	5,418,842	5/23/95	Cooper	,	379	98		
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10	155	WO 98/37657	8/27/98	PC		H04L	11/00	1	
	156	WO 96/18261	6/13/96	PC		H04M H04L	27/00		٠.
• •	157	0 669 740 A2	12/14/94	Euro	-		11/06		
	158	0 659 007 A2	11/8/94	Euro		H04M H04N	1/00	1	
•	159 160	0 473 116 A2 2 345 019	8/27/91 3/19/76	Euro Fran		H04L	27/10		
	1	I	1	ncluding Author,		ertinent Pages	Etc.)		
	161	Frun et al Just	ernolation is	Digital Modems	- Part II Imi	olementation	and Perform	ance. IEEE	
	101	Transactions or	. Communic	ations, Vol. 41, N	6 nn 998-	1008 (June 19	993)		
	162	Fischer Signal	Manning for	r PCM Modems,	V-ncm Ranno	teur Meeting	Sunriver O	regon, USA	5
	162				у -реш каррол	ricar ivicoting	,		,,-
	100	pgs. (Septembe	1 4-12, 199/) Igital Modems - I	Part I. Funda	mentals TEFT	Transaction	is on	
<u> </u>	163	Communication	ne Vel 41	No 3 no 501 50	7 (March 100	e		 v	
	1-1-1-	Communication	us, voi. 41,	No. 3, pp. 501-50 ation Driveway, <u>I</u>	CEE Commiss	ications Mag	azine nn 64.	68 (Decemb	ner -
	164	Humblet et al., 1996)	1 ne Informa	ation Driveway, <u>11</u>	CEE Commun	ications iviage	<u>алие</u> , pp. 04.	-00 (Decenii	, LOI
	165	Volet et al Th	a Canasit: -	of PCM Voiceband	Channele II	FF Internation	onal Conferen	nce on	
	165	Communication	e Capacily o	507-511 (Geneva,	Switzerland	May 23-26 1	993)	 .	
· · · · · · · · · · · · · · · · · · ·	166	Mueller et el	<u>115 73, pp. 3</u> Timing Post	very in Digital Sy	inchronous D	ata Receiver	IEEE Transa	ctions on	
•	1 100	Communication	- Val Ca-	m-24, No. 5, pp. 5	16 521 (May	1076)			

DATE CONSIDERED

Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if *EXAMINER not in conformance and not considered. Include copy of this form with next communication to applicant.

							
FORM PTO-		J.S. Department of Commerce t and Trademark Office	Attorney Docket Number Serial N RA9-99-0110/4269-83 09/430,5				
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		The second second	October 29, 1999	plagy Center 2600			
	7.7	Adamos (1)	- Cit. DCM TDMA Subscribe	or System and Direct			
	167	Okubo et al., Building Block Design of Larg Digital Interface to Digital Exchange, Japa	n Radio Co., Ltd., pp. 69-73 (Japan)			
	168	Pahlavan et al., Nonlinear Quantization and IEEE Transactions on Communications, Vo	ol. 39, No. 8, pp. 1207-1215 (Augus	st 1991)			
	169	Proakis, Digital Signaling Over a Channel pgs. 373, 381 (McGraw-Hill Book Compar	with Intersymbol Interference, Digi	tal Communications,			
	170	Williams et al., Counteracting the Quantise (UK)	ation Noise from PCM Codecs, BT	Laboratories, pp. 24-29			
		A Digital Modem and Analogue Modem Po	in for Hea on the Public Switched T	Calanhona Naturak			
	171	(PSTN) at Data Signalling Rates of Up to S	56 000 Bit/s Downstream and 33 60	00 Bit/s Upstream, ITU-T			
		<u>V.90</u> (September 1998)					
	172	Series V: Data Communication Over the To	elephone Network; Interfaces and v	oicebana moaems; A			
		modem operating at data signalling rates o	of up to 33 600 bit/s for use on the g	general switched			
		telephone network and on leased point-to-	point 2-wire telephone type circuits	, <u>ITU-1 V.34</u> (10/96)			
	173	Bell, R.A., et al., Automatic Speed Reducti Disclosure Bulletin, Vol. 32, No. 1, pp. 15	on and Switched Network Back-up, 4-157 (June 1989)	IBM Technical			
	174	Abbiate, J.C., et al., Variable-Data Transn	Abbiate, J.C., et al., Variable-Data Transmission Modem, IBM Technical Disclosure Bulletin, Vol. 17,				
		No. 11, pp. 3301-3302 (April 1975)	N. J. D J Confine C	Cassians of Data			
	175	Data Communication Over the Telephone Network; Procedures for Starting Sessions of Data Transmission Over the General Switched Telephone Network, ITU-T V.8 (09/94)					
	176	Line Quality Monitoring Method, IBM Technical Disclosure Bulletin, Vol. 18, No. 8, pp. 2726-2726					
		(January 1976)	· · · · · · · · · · · · · · · · · · ·				
	177	Loopback Tests for V.54 Data Communica 32, No. 3A, pp. 295-299 (August 1989)					
	178	On-Line Real Time Modem Testing, IBM	Technical Disclosure Bulletin, Vol.	20, No. 6, pp. 2252-2254			
·		(November 1977)	18	IEEE Transactions on			
	179	Pierobon, Gianfranco L., Codes of Zero Sp Information Theory, Vol. IT-30, No. 2, pp	o. 435-439 (March, 1984)	<u> </u>			
	180	Marcus, Brian H, et al., On Codes with Sp	ectral Nulls at Rational Submultiple	es of the Symbol			
	ļ .	Frequency, IEEE Transactions on Informa	ation Theory, Vol. IT-33, No. 4, pp	. 557-568 (July 1987)			
	181	Fischer, Robert, et al., Signal Mapping for	PCM Modems, ITU-Telecommuni	ications Standardization			
	*	Sector PCM '97-120, V.pcm Rapporteur I	Meeting, (Sunriver, Oregon; Septen	nber 4-12, 1997)			
	182	Pulse Code Modulation (PCM) of Voice F	requencies, ITU-T, Recommendati	ion G.711 (Geneva, 1972)			
	183	Series G: Digital Transmission Systems; T	Terminal equipments - Coding of a	nalogue signals by pulse			
	105	code modulation; Pulse code modulation (Geneva, 1996)	(PCM) of voice frequencies, ITU-T	Recommendation G.711			
	104	Data Communication Over the Telephone	Not work Error Correcting Proces	duras for DCEs Using			
	184	Asynchronous-to-Synchronous Conversio	n, <u>ITU-T V.42</u> (03/93)	·			
	185	Improvement to Spectral Shaping Technic 1551 (November 1998)	•	·			
1	186	TIA Standard Draft: North American Tel	ephone Network Transmission Mod	lel for Evaluating Analog			
		Client to Digitally Connected Server Mod PN3857, Draft 10 (February 1999)	lems, Telecommunications Industry	Association,			
	1.00	TASOS (,DIAIL TO (FEDILIARY 1999)	-law autation of model hand counts	ellation generation			
	187	Davis, Gordon T., DSP and MATLAB imp (September 18, 1998)	•	A.			
	188	Woodruff, K.R, et al, Automatic and Ada	ptive System and Efficient Commun	iication in Noisy			
		Communication Line Environments, IBM	Technical Disclosure Bulletin, Vo	1. 24, No. 9, pp. 4627-4629			

EXAMINER *EXAMINER

DATE CONSIDERED

Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-		J.S. Department of Commerce t and Trademark Office	Attomey Docket Number RA9-99-0110/4269-83	Serial No. 09/430,501		
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	•	\ Q	Filing Date: Technology Cor October 29, 1999	ar 280031		
		E TRADEMICE.	October 29, 1999	161 208031		
	100	Godard, D., et al., Decision Feedback Equa	liner Stabilization in Adaptive Mode IBM	Technical		
	189			recinical		
	100	<u>Disclosure Bulletin</u> , Vol. 24, No. 11A, pp. Borgnis-Desbordes, P., et al., <i>Variable-Spe</i>	ad Data Transmission IBM Technical Dis	clocura Pullatin		
	190			closure Dunetin,		
	101	Vol. 27, No. 4A, pp. 2269-2270 (September Couland, G., et al., Analog Wrap Self-Test	in Madama Duming Patricia Operations (IR)	M Technical		
	191	Couland, G., et al., Analog wrap Self-1est	in Modems During Retrain Operations, 185	vi Technicai		
	100	<u>Disclosure Bulletin</u> , Vol. 28, No. 6, pg. 245 Maddens, F., Sixteen-State Forward Convo	Vitimal Francisco IDM Technical Disaless	Pullotin vol		
•	192			ire Bulletill, Vol.		
	102	28, No. 6, pp. 2466-2468 (November 1985 Remote Modem-Type Self-Learning, IBM 7		6 nn 2200		
	193		rechnical Disclosure Bulletin, Vol. 28, 140.	o, pp. 2396-		
	104	2399 (November 1985)	-Latin - LEuro des IDM Tochmical Disclos	uro Bullotin		
,	194	Maddens, F., Sixteen-State Feedback Conv		ure Bulletin,		
	105	Vol.28, No. 10, pp. 4212-4213 (March 198	10 it 1 - 1 Not work Book on TOM T	`achrical		
·	195	Bell, R. A., et al., Automatic Speed Reduct		ecimicai		
	100	Disclosure Bulletin, Vol. 32, No. 1, pp. 156	Goding Scheme for a 10/2 Khas Modern II	M Technical		
٠.	196	Nobakht, R.A., Trellis-Coded Modulation		Sivi Technicai		
<u></u>	100	Disclosure Bulletin, Vol. 36, No. 11, pp. 10	1993)	Fachnical		
	197	Nobakht, R.A., Unified Table Based Subse		<u>rechnicar</u>		
·	100	Disclosure Bulletin, Vol. 37, No. 09, pp. 5	81-387 (September 1994)	home IDM		
	198	Nobakht, R.A., Trellis Subset Decoder Alg	orithm Basea on a Pattern Recognition Sci	neme, <u>IBIVI</u>		
	100	Technical Disclosure Bulletin, Vol. 37, No.	1. 10, pp. 693-697 (October 1994)	Dullotin Vol. 17		
	199	Abbiate, J.C., et al, Variable-Data Transm	ission Modem, IBM Technical Disclosure	Bulletin, Vol. 17,		
	000	No. 11, pp. 3301-3302 (April 1975)	L. C. and Madama IDM Technical Displace	nura Bullatin Val		
• • •	200	Barlet, J., et al., Full Speed Recovery in Hi	igh Speed Modems, IBM Technical Disclos	ure Bulletin, Vol.		
<u> </u>	201	23, No. 2, pp. 641-643 (July 1980)	Juntary and day Evennen Potent No. 285/	112		
<u> </u>	201	Dialog Abstract, Sample rate converter for	duplex modem, European Fatelit No. 283-	9501407		
	202	Dialog Abstract, Two-speed full-duplex mo		8301407		
	203	Dialog Abstract, Digital data transmission	system, European Patent No. 1240/4	75060 (7 22		
	204	Dialog Abstract, Facsimile communication	n controller, Japanese Publication No. 04-1	75060 (June 23,		
	<u> </u>	1992)	D 11'1' N- 02 12'	2054 (24 22		
	205	Dialog Abstract, Picture communication e	quipment, Japanese Publication No. 03-120	1954 (Iviay 25,		
		1991)	D 11: N- 01 17060	05 (Tesley 17, 1090)		
	206	Dialog Abstract, Radio date transmission				
·	207		se Publication No. 57-164654 (October 9,			
	208	Dialog Abstract, Data repeater, Japanese	Publication No. 57-087255 (May 31, 1982)		
170	209		l for decision feedback equaliser having fee	ea-jorwara ana		
	1	feedback filters, European Patent No. 880	253	Detect		
	210		istorted signal received by qam receiver, E	uropean Patent		
	No. 465851					
	211		mmunication channel, PCT No. WO 99058			
	212		e subscriber line digital data modem, PCT			
	213		modulation system, Japanese Patent No. 8			
	214		ent and radio communication adapter, Japa	nese Publication		
		No. 08-340289 (December 24, 1996)				
	215		Japanese Publication No. 05-089597 (April			
1	216		stem for data communication and its moder	n equipment,		
1	1	Japanese Publication No. 02-228853 (Sep	tember 11, 1990)			

DATE CONSIDERED

*EXAMINER

FORM PTO-		S.S. Department of Commerce and Trademark Office	Attorney Docket Number RA9-99-0110/4269-83	Serial No. 09/430,501			
TICT OF DO	ריז אינדא אנו זיר	TO CITED BY ADDI ICANDO	RECEIVED				
		ecessary)	Applicant: Hwang, et al. OCT 3 1 2002				
(Use several s	neets if n	2002		1			
		Carl 3 one of	Filing Date: Teghnology Cor October 29, 1999	2697 0 up 2731			
		ENT					
	217	Naguib, A.F., et al., Dialog Abstract, A spa	ce-time coding modem for high-data-rate v	vireless			
	communications, IEEE Journal of Selected Areas in Communications, Vol. 16, No. 8, pp. 1459-78						
	210	(October 1998) Denno, S., et al., Dialog Abstract, Mbit/s bit	west modern with an adaptive equalizer for	TDMA mobile			
	218	radio communications, IEICE Transactions	s on Communications, Vol. E81-B, No. 7, 1	pp. 1453-61 (July			
	210	1998)	time and dive modern for high data rate	viroloss			
-	219	Naguib, A.F., et al., Dialog Abstract, A spa	Clabel Telecommunications Conference V	ol 1 pp 102-0			
		communications, GLOBECOM 97, IEEE (Jiouai Telecomminumeations Conference, V	on 1, pp. 102-9			
	220	(1997) Kobayashi, K., et al., Dialog Abstract, Fuli	by digital hurst modem for satellite multime	dia			
	220	communication systems, IEICE Transaction	ns on Communications vol E80-B. No. 1	nn 8-15			
		(January 1997)	13 on Communications, 100 200-2, 110. 1,	EE. C. TO			
	221	Skellern, D.J., et al., Dialog Abstract, A hig	ph speed wireless LAN. IEEE Micro. Vol 1	7, No. 1, pp. 40-			
	221	47 (January-February 1997)	5 ak	-,			
	222	Enomoto, K., et al., Dialog Abstract, A mo	de switching type burst demodulator AFC,	Transactions of			
the Institute of Electronics, Information and Communication Engineers, Vol. J76B-II, No. 5							
l		21 (May 1993)					
<u></u>	223	Betts, W., Dialog Abstract, Nonlinear enco	oding by surface projection, International C	Conference on			
		Data Transmission - Advances in Modem	and ISDN Technology and Applications (S	September 23-25,			
1	·	1992)					
	224	Schilling, D.L., et al., Dialog Abstract, The FAVR meteor burst communication experiment, Military					
	1 22-	Communications in a Changing World MI	LCOM '91 (November 4-7, 1991)	ad mataon herest			
1	225	Jacobsmeyer, J.M., Dialog Abstract, Adap	tive trellis-coded modulation for bandlimit	eu meieor oursi SO-61 (April			
	1.		in Communications, Vol. 10, No. 3, pp. 55	o-or (whin			
	226	1992)	configuration and verification of an adapti	ve error control			
1	226	scheme over analog cellular networks IFI	EE Transactions on Vehicular Technology,	Vol. 41, No. 1.			
	-	pp. 69-76 (February 1992)	DE TIMISACTIONS ON VOMONIAL TOOMISTORY,				
 	227	Lee, LN., et al., Dialog Abstract, Digital	signal processor-based programmable BP	SK/OPSK/offset-			
	22'	QPSK modems, COMSAT Technical Rev	iew, pp. 195-234 (Fall 1989)	L			
	228	Sato, T., et al., Dialog Abstract, Error-free	e high-speed data modem, Oki Technical R	eview, Vol. 56,			
		No. 133, pp. 20-26 (April 1989)					
	229	Seo, JS, et al., Dialog Abstract, Performa	ance of convolutional coded SQAM in hard	llimited satellite			
		channels, IEEE International Conference	on Communications BOSTONICC/89, Vol	l. 2, pp. 787-91			
1	i ·	(June 11-14, 1989)					
	230	Murakama, K., et al., Dialog Abstract, Fl	EC combined burst-modem for business sat	ellite			
		communications use, IEEE/IECE Global	Telecommunications Conference 1987, Vo	l. 1, pp. 274-80			
1		(Japan, November 15-18, 1987)	•				
	231	McVerry, F., Dialog Abstract, Performan	ce of a fast carrier recovery scheme for bu	rst-format DQPSK			
		transmission over satellite channels, Inter	national Conference on Digital Processing	of Signals in			
	<u> </u>	Communications, pp. 165-72 (United Kin	igdom, 1985)				
- 8-	232	Filter, J.H.J., Dialog Abstract, An algorith	hm for detecting loss of synchronisation in	data transmission			
		test sets (modems), Transactions of the Sc	outh African Institute of Electrical Engineer	rs, Vol. 76, No. 1,			
	-	pp. 39-43 (January 1985)		· · · · · · · · · · · · · · · · · · ·			
	233	Gersho, A., Dialog Abstract, Reduced con	mplexity implementation of passband adapt	tive equlizers,			
		IEEE Journal on Selected Areas in Comm	nunications, Vol. SAC-2, No. 5, pp. 778-9	(September 1984)			
	234		modem reduces telephone connect time, $\overline{ t EL}$	<u>N</u> , Vol. 27, No.			
<u>l</u> .		18, pg. 77 (September 15, 1982)		•			

EXAMINER DATE CONSIDERED

*EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

							
FORM PTO-		J.S. Department of Commerce t and Trademark Office	Attorney Docket Number RA9-99-0110/4269-83	Serial No. 09/430,501			
LIST OF DOO		TS CITED BY APPLICANT	Applicant: Hwang, et al.				
	necis ii i	OCT 3 0 2002 (E)	Filing Date: October 29, 1999	Group 2731			
	235	Chadwick, H., et al. Dialog Astract, Perfisatellite channel, Fifth International Confe	formance of a TDMA burst modem thro rence on Digital Satellite Communicati	ugh a dual nonlinear ons, pp. 63-7 (Italy,			
] -]	-March-23-26, 1981)					
	236	Nussbaumer, H., Dialog Abstract, Reducing Technical Disclosure Bulletin, Vol. 18, No.	. 5, pp. 1465-79 (October 1975)				
	237	Uzunoglu, V., et al., Dialog Abstract, Syncoscillators: new techniques in synchronize Systems, Vol. 36, No. 7, pp. 997-1004 (June 1997-1997-1997-1997-1997-1997-1997-1997	hronous and the coherent phase-locked ation and tracking, IEEE Transactions	d synchronous on Circuits and			
	238	Minei, I., et al., Dialog Abstract, <i>High-spe</i> satellite channels, <u>IEEE Journal on Selecter</u> (February 1999)	ed Internet access through unidirectioned Areas in Communications, Vol. 17,	nal geostationary No. 2, pp. 345-59			
	239	Ovadia, S., Dialog Abstract, The effect of interleaver depth and QAM channel frequency offset on the performance of multichannel AM-VSB/256-QAM video lightwave transmission systems, International Conference on Telecommunications: Bridging East and West Through Communications, Vol. 1, pp.					
	240	339-43 (Greece, June 21-25, 1998) Johnson, R.W., et al., Dialog Abstract, Error correction coding for serial-tone HG transmission, Seventh International Conference on HF Radio Systems and Techniques, pp. 80-84 (United Kingdom, July 7-10, 1997)					
	241	Karasawa, Y., et al., Dialog Abstract, Cycle slip in clock recovery on frequency-selective fading channels, IEEE Transactions on Communications, Vol. 45, No. 3, pp. 376-83 (Mach 1997)					
	242	Umehira, M., et al., Dialog Abstract, Desi compensated filter, Transactions of the In Engineers, Vol. J78B-II, No. 12, pp. 735-	Umehira, M., et al., Dialog Abstract, Design and performance of burst carrier recovery using a phase compensated filter, Transactions of the Institute of Electronics, Information and Communication Engineers, Vol. J78B-II, No. 12, pp. 735-46 (December 1995)				
	2,43	De Bot. P., et al., Dialog Abstract, An exa	De Bot, P., et al., Dialog Abstract, An example of a multi-resolution digital terrestrial TV modem, Proceedings of ICC '93 – IEEE International Conference on Communications, Vol. 3, pp. 1785-90				
	244	Lei, Chen, et al., Dialog Abstract, Single- '93 – IEEE Region 10 International Conf. 3, pp. 94-98 (China, October 19-21, 1993)	erence on Computers, Communications				
	245	Woerner, B.D., et al., Dialog Abstract, Scommunications, Vol. 32, No. 7, pp. 42-	imulation issues for future wireless mod	dems, <u>IEEE</u>			
	246	Sato, T., et al., Dialog Abstract, Vehicle to	erminal equipment with dedicated DSP v 1992)				
	247						
	248	Tamm, Yu.A., Dialog Abstract, The effect equalizer, Elektrosvyaz, Vol. 45, No. 3, p	pp. 5-10 (Mach 1990)				
	249	Saleh, A.A.M., et al., Dialog Abstract, An systemusing slow frequency hopping and 1, pp. 152-62 (January, 1991)	n experimental TDMA indoor radio con coding, IEEE Transactions on Commu	inications, Vol. 39, No.			
	250	Nergis, A., Dialog Abstract, Optimum Hi interleaving techniques, Proceedings of t Communication, Control and Signal Proc	he 1990 Bilkent International Conferer cessing, Vol. 1, pp. 511-17 (Turkey, Ju	nce on New Trends in ly 2-5, 1990)			
	251	Kawamata, F., et al., Dialog Abstract, An Communications Research Laboratory,	evaluation of voice codecs and facsim	iles, Review of the			

DATE CONSIDERED

Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if *EXAMINER not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1		S. Department of Commerce and Trademark Office	Attorney Docket Number RA9-99-0110/4269-83	Serial No. 09/430,501			
LIST OF DOC	UMEN]	TS CITED BY APPLICANT OIPE		1 2002			
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•		(OCT 3 0 2002 (\$\frac{1}{2}\)	Filing Date:	Contar Segip			
		\2 001 J - 2002 G/	October 29, 1999	2731			
			1				
T	252	Sato, T., et al., Dialog Abstract Affror-free	high-speed data transmission protocol sin	nultaneously			
	232	applicable to both wire and mobile radio ci	hannels 38th IEEE Vehicular Technology	Conference:			
	1	<u>'Telecommunications Freedom - Technolo</u>	gy on the Move', pp. 489-96 (June 15-17	.1988)			
	253	Dialog Abstract, 1200-bit/s cellular modem	DLD03H Oki Technical Review, Vol. 5	3. No. 127, pp.			
	233	70-72 (July 1987)	, DDD 0011, <u>GAA 100001100 110</u> ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
	254	Chamberlin, J.W., et al., Dialog Abstract, L	Design and field test of a 256-OAM DIV m	odem, IEEE			
	234	Journal on Selected Areas in Communication	ons. Vol. SAC-5. No. 3, pp. 349-56 (Apri	1 1987)			
	255	De Cristofaro, R., et al., Dialog Abstract, A	120 By/s OPSK modem designed for the	INTELSAT TDMA			
	233	network, International Journal of Satellite	Communications. Vol. 3, Nos. 1-2, pp. 14	5-60 (JanuaryJune,			
		1985)	,11	· í			
	256	Shumate, A., Dialog Abstract, Error correct	ction coding for channels subject to occas	ional losses of bit			
٠	230	count integrity, IEEE Military Communica	tions Conference, Vol. 1, pp. 89-83 (Octo	ber 21-24, 1984)			
*							
	257	Suyderhoud, H., et al., Dialog Abstract, In	vestigation of 9.6 kb/s data transmission v	ria a PCM link at			
		64 kb/s with and without link errors, Intern	national Journal of Satellite Communication	ons, Vol. 2, No. 1,			
		pp. 81-87 (January-March, 1984)					
<u> </u>	258						
1		Technology, Vol. 2, No. 1, pp. 41-53 (Sep.	tember-October 1983)	ŀ			
	259	Suyderhoud, H., et al., Dialog Abstract, In	vestigation of 9.6-kbit/s data transmission	via a PCM link at			
		64 kbit/s with and without link errors, Sixt	h International Conference on Digital Sat	<u>ellite</u>			
	·	Communications Proceedings, pp. 26-33 (September 19, 23, 1983)				
	260	Kittel, L., Dialog Abstract, Analogue and	discrete channel models for signal transm	ission in mobile			
		radio, Frequenz, Vol. 36, Nos. 4-5, pp. 15	53-60 (April-May 1982)				
	261	Farrell, P.G., et al., Dialog Abstract, Soft-o	decision error control of h.f. data transmis	ssion, <u>IEE</u>			
·		Proceedings F (Communications, Radar and	nd Signal Processing), Vol. 127, No. 5, pp	o. 389-400 (October			
	<u> </u>	1980)					
	262	Johnson, A.L., Dialog Abstract, Simulatio	n and implementation of a modulation sys	stem for			
		overcoming ionospheric scintillation fadir	ng, AGARD Conference Proceedings No.	173 on Radio			
	ļ	Systems and the Ionosphere, pp. 3/1-5 (Gr	reece, May 26-30, 1975)				
	263	Matsumura, K., et al., Dialog Abstract, An	nti-interference data-transmission set of H	F radio equipment,			
	Í	Mitsublishi Electric Engineer, No. 41, pp.	18-23 (September, 1974)	<u> </u>			
	264	Blank, H.A., et al., Dialog Abstract, A Ma	rkov error channel model, 1973 National	,			
	<u> </u>	Telecommunications Conference, Vol. 1,	pp. 15B/1-8 (November 26-28, 19/3)	24001			
	265	McGruther, W.G., Dialog Abstract, Long	term error performance data for operation	n at 2400 bps ona			
		nonswitched private line network, Summa	aries of papers presented at 1970 Canadian	i symposium on			
	<u> </u>	communications, pp. 65-6 (Canada, Nove	mber 12-13, 1970)	i i i u au dalambama			
	266	Burton, H.O., et al., Dialog Abstract, On a	the use of error statistics from data transn	nission on telephone			
ļ	1	facilities to estimate performance of forward	ard-error-correction, 1970 international c	onterence on			
		communications, p. 21 (June 8-10, 1970)		J Com			
l .	267	Bowen, R.R., Dialog Abstract, Application	on on burst error correction codes to data	moaems jor			
Į.	1	dispersive channels, Proceedings of the 1	970 international symposium on informati	ion theory, p. 1			
	<u> </u>	(Netherlands, June 15-19, 1970)	1	anutual andina ta			
	268	Pierce, A.W., et al., Dialog Abstract, Effe	ctive application of forward-acting error-	Control Coaing to			
Į.	1	multichannel h.f. data modems, IEEE Tra	insactions on Communication Technology	, voi. Com-18, No.			
	1	4, pp. 281-94 (August 1970)	16 d - J IDB4 Trah-i Disclare Dull	otin nn 497 490:			
1	269	West, R.L., Abstract, Data Concentration http://w3.infogate.ibm.com:1207/SESS50	Method, IBM Technical Disclosure Bull	<u>стт</u> , рр. 407-402,			

EXAMINER *EXAMINER

DATE CONSIDERED

Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Patent	S. Department of Commerce and Trademark Office	Attorney Docket Number RA9-99-0110/4269-83	Serial No. 09/430,501			
LIST OF DOCUMENT	S CITED BY APPLICATED BY APPLI	Applicant: Hwang, et al.	CEIVED			
	OCT 3 0 2002 \$		8 1 2002 By Center 2731			
270	Haas, L.C., et al., Abstract Medicated Line Spp. 5414-5416; http://w3.infogate.ibm.com	Signal Quality Analysis, IBM Technical I 1:1207/SESS506884/GETDOC/43/1/1 (M	Disclosure Bulletin, Iay, 1981)			
271	Nussbaumer, H., Abstract, Reducing the Acquisition Time in an Automatic Equalizer, IBM Technical Disclosure Bulletin, pp. 1465-1479; http://w3.infogate.ibm.com:1207/SESS506884/GETDOC/40/2/1 (October 1975)					
272	Dialog Abstract, Listener echo canceller fo	or digital communication system, PCT No	. WO 9310607			
273	1.1.0.00 OIL 1.1.00 DOIL 1.1.0					

COPY

RAL9-99-0110/4269-83/TJO:vp June 28, 2000

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Respectfully,
MYERS BIGEL SIBLEY & SAJOVEC
Attorneys for Applicant